

# Liquid Biopsy to Monitor Treatment Response

Department of Pathology, LUMC

*Pitch Your Study*

- *Aim:*
- Monitor response to neoadjuvant treatment using circulating tumor DNA (ctDNA)
  - Liquid biopsy (ctDNA) is accepted method to determine TKI resistance T790M in NSCLC
  - Pilot experient: KRAS mutation detectable in mCRC ctDNA
- Applicable to rectal cancer?
  
- *Design:*
- Compare somatic mutation profile in tumor and ctDNA prior to treatment
- Detect single somatic mutations in ctDNA during follow-up

*Pitch Your Study*

- *(overview study)*
- Somatic mutation profiling:
  - Tumor/ plasma: Cancer hotspot panel dedicated for ctDNA
- $\geq 2$  time points during follow-up
  - Digital droplet PCR for specific mutations (increased sensitivity)
  
- *What this study will teach us:*
- Percentage of cases where mutations in plasma are detected
- Can these mutations be used for treatment response

*Pitch Your Study*

- *Number pts needed:*
- Initial study 20-30 patients
- With additional funding more ...
  
- *Seeking for:*
- Tumor tissue and plasma
- Exchange experience:
- Methodology, routing
  
- *Contact information:*
- [Tom van Wezel: T.van\\_wezel@lumc.nl](mailto:T.van_wezel@lumc.nl)
- [Arantza Farina: A.Farina\\_Sarasqueta@lumc.nl](mailto:A.Farina_Sarasqueta@lumc.nl)
- [Hans Morreau: J.Morreau@lumc.nl](mailto:J.Morreau@lumc.nl)

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